



Valvular Heart Disease

MALIGNANT NATURAL HISTORY OF PATIENTS WITH DEGENERATIVE MITRAL STENOSIS: BIOLOGICAL PREDICTORS OF SURVIVAL IN A COHORT OF 1004 PATIENTS

ACC Moderated Poster Contributions
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Background: Degenerative mitral stenosis (DMS) is an increasingly common echocardiographic finding. However, its clinical and biological behaviors are not known.

Methods: We searched our echocardiographic database for patients with DMS defined as severe mitral annular calcification with extension to the leaflets with a mean diastolic gradient (MG) of at least 2 mmHg and absence of commissural fusion. DMS was graded as mild (MG 2-5 mmHg), moderate (MG 6-8 mmHg) and severe (MG >9 mmHg). Of the 1,004 patients with DMS - 79% were mild, 14% were moderate and 7% were severe. Comprehensive chart reviews were performed for clinical data and mortality data was collected from NDI.

Results: Patient characteristics were as follows: Age 73 ± 14, women 73%, CAD in 49%, AF in 28%; diabetes mellitus in 50%; renal insufficiency in 37%, LVEF 65 ± 14%. Over a follow-up of 3.5 ± 2.8 years, there were 549 deaths with 1 and 5 year survivals of 78% and 47% respectively being slightly worse with higher DMS grades (p=0.02, figure). Other predictors of poor survivals included greater age (p<0.0001), AF (p= 0.001), renal insufficiency (p= 0.004), low LVEF (p= <0.0003), tricuspid regurgitation (TR) (p= 0.0001), and aortic stenosis (p= 0.02). Age, AF and TR were independent predictors of higher mortality.

Conclusion: 1) DMS is common and occurs in mostly elderly women and is associated with diabetes and renal failure. 2) It is a marker of poor survival even when mild. 3) Older age, AF and TR are independent predictors of poorer prognosis in DMS.

